

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A machine implemented method comprising:  
accessing rows in a database table, wherein:  
each row in the table corresponds to a dimension value combination;  
each row in the table is stored in a block; and  
a location within a block at which each row is stored is determined based on  
the dimension value combination to which the row corresponds; and  
wherein the accessing of the rows also includes, in response to receiving a request for  
a row corresponding to a particular dimension value combination, using the  
particular dimension value combination for calculating a value that represents  
the block that stores the location of the particular row.
2. (Original) The method of claim 1, wherein  
the dimension value combination includes values for one or more dimensions, and  
the table does not include columns for storing values for the one or more dimensions.
3. (Original) The method of claim 1, wherein said table includes a plurality of  
segments, and  
wherein each segment stores rows for a contiguous range of dimension value  
combinations.
4. (Currently Amended) The method of claim 3, further comprising creating an  
indexed organized table (~~IOT~~) that includes

an entry for each segment in the plurality of segments[[,]]; and  
the calculating of ~~the position of~~ a value that represents the block that stores  
the particular row is based in part on information contained in the entry  
that corresponds to the segment that contains the particular row.

5. (Currently Amended) The method of claim 3,  
wherein sizes of the plurality of segments and locations contained within the plurality  
of segments are allocated according to a density of discontinuities in ranges of  
dimension value combinations.
6. (Currently Amended) The method of claim 3, further comprising accessing an  
indexed organized table (IOT) that includes an entry for each segment in the  
plurality of segments; and  
the calculating of ~~the position of~~ a value that represents the block that stores  
the particular row is based in part on information contained in the entry  
that corresponds to the segment that contains the particular row.
7. (Original) The method of claim 6, wherein the index organized table includes  
nonkey information used for determining locations of gaps in ranges of  
dimension value combinations that are between the segments.
8. (Original) The method of claim 6, wherein at least one of the plurality of segments  
includes more than one contiguous range of dimension value combinations.
9. (Original) The method of claims 6, wherein at least one of the plurality of  
segments comprises at least two contiguous range of dimension value

combinations that are joined together by at least one dummy entry in the table, therein forming one contiguous range of dimension value combinations.

10. (Original) The method of claim 6, wherein the at least two of the plurality of segments are each divided into blocks having a block size, and the block size of a first of the at least two of the plurality of segments is different from the block size of a second of the at least two of the plurality of segments.
11. (Currently Amended) The method of claim 5, wherein the ~~IOT~~-indexed organized table includes an identification of a reference location for each segment of the plurality of segments from which offsets from the reference location are calculated to reach other locations in each of the segments.
12. (Original) The method of claim 3, wherein each of the plurality of segments is divided into one or more blocks of equal size.
13. (Original) The method of claim 1, wherein the accessing of the location of interest is also performed by at least accessing a table having an identification of a dimension value of a reference location included in the block from which offsets are calculated to other locations.
14. (Original) The method of claim 13, wherein the reference location is an index value of a first of location within a segment that stores rows for a contiguous range of dimension value combinations.
15. (Original) The method of claim 13, wherein the table having the identification is a B-tree index.

16. (Original) The method of claim 13, wherein the table having the identification is a bit map index.
17. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 1.
18. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 2.
19. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 3.
20. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 4.
21. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 5.
22. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 6.

23. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 7.
24. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 8.
25. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 9.
26. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 10.
27. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 11.
28. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 12.
29. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 13.

30. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 14.
31. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 15.
32. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 16
33. (Original) A computer-readable medium carrying one or more sequences of instructions, which when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 17
34. (Currently Amended) ~~A system comprising a computer readable media system including one or more computer readable media~~ computer-readable medium,  
~~the computer readable media system~~ having stored therein at least:  
a database table storing data on the computer readable media that corresponds to  
locations associated with at least one dimension value;  
wherein the data items are stored in blocks of the table in an order dictated by the ~~data~~  
dimension values to which the data items correspond; and  
wherein the table does not store values for the particular dimension.
35. (Currently Amended) The ~~system~~ computer-readable medium of claim 34,  
wherein all of the locations of the table that have non-null values are

organized into one or more segments, each segment including a contiguous region of data without discontinuities in the dimensions.

36. (Currently Amended) The ~~system~~computer-readable medium of claim 35, wherein the table has associated with it at least one dimension value combination

that is associated with a null value[[],]; and

that is not included in any of the one or more segments.

37. (Currently Amended) The ~~system~~computer-readable medium of claim 36, wherein the ~~computer-readable media~~system computer-readable medium also has stored therein at least:

another table storing identifiers for determining the locations stored within each segment of the one or more segments.